Jin-Ho PARK

Application No.: 09/886,028

### **REMARKS**

Claims 1-17 are pending. By this amendment, the Title and claims 1-3, 6 and 8 have been amended. No new matter has been added.

In view of the above amendments and the following Remarks, Applicants respectfully request reconsideration and timely withdrawal of the pending objections and rejections for the reasons discussed below.

## Title Objection

In the Office Action, the title of the invention is objected to for not being descriptive. The title has been amended to read

-- FLAT PANEL DISPLAY USING DIGITAL DATA TRANSMISSION --.

Accordingly, Applicant respectfully requests withdrawal of the objection to the title.

#### Claim Objection

Claims 1 and 3 are objected to for minor informalities. Specific language in claims 1 and 3 was identified as forming the basis for the objection. Claim 1 has been amended to remove the extra semicolon and claim 3 has been amended to recite "a first D/A converter" instead of "a first A/D converter" responsive to the objection. It is respectfully requested that the objection to claims 1 and 3 be withdrawn.

#### Rejections Under 35 U.S.C. §103

Claims 1, 2 and 4 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,764,216 issued to Tanaka, et al. ("Tanaka") in view of U. S. Patent No. 6,166,725

issued to Isami, *et al.* ("Isami"). Applicant respectfully traverses this rejection for at least the following reasons.

Page 3 of the Office Action states that col. 2, lines 57-64 of Tanaka discloses a flat panel display that has the capability of generating gamma data having a plurality of values for gradation and a column driver unit for converting the gamma data into an analog gradation voltage, and outputting a column signal utilizing the column control signal, R, G, B data and the gradation voltage.

First, Applicant respectfully submits that claim 1 recites a controller for generating a scan control signal and a column control signal by utilizing driving data and a driving control signal . . . and generating gamma data having a plurality of values for gradation. Col. 2, lines 1-4 of Tanaka, which is cited on page 3 of the Office Action only states that it is an object of the invention to gamma-correct display date of multiple gray scale with a small number of latches by easily forming a date selecting means using logic gates for reducing the consumption of electric power. Nowhere does Tanaka disclose a controller with at least all the features set forth above, as recited in claim 1.

Secondly, Applicant respectfully submits that the col. 2, lines 57-64 of Tanaka simply state that the liquid crystal driver comprises ... a selector for selecting one out of uncorrected N-bit digital display data and the correction data and supplying the selected one as driving data for the liquid crystal display panel; and means for converting the driving data supplied by the selector into an analog signal. Thus, Applicant submits that nowhere does Tanaka disclose a controller for generating a scan control signal and a column control signal by utilizing driving data and a driving control signal . . . and generating gamma data having a plurality of values for

gradation and a column driver unit for outputting a column signal utilizing the column control signal, R, G, B data and the gradation voltage, as recited in claim 1.

For at least these reasons, Applicant submits that the combination of Tanaka and Isami fails to disclose or suggest all the features of claim 1 and thus, fails to render obvious the subject matter of claim 1. For at least this reason, Applicant also submits that the combination of Tanaka and Isami fails to disclose or suggest all the features of claims 2 and 4, which depend from claim 1. It is respectfully requested that the rejection be withdrawn.

Claims 3 and 5 are rejected under 35 U.S.C. §103(a) as being unpatentable over Tanaka, Isami, and further in view of U.S. Patent No. 5,363,118 issued to Okumura, and U.S. Patent 6,160,532 issued to Kaburagi, *et al.* ("Kaburagi"). Applicant respectfully traverses this rejection for at least the following reasons.

For at least the reasons discussed above with regards to claim 1, Applicant submits that the combination of Tanaka and Isami fails to disclose or suggest all the features of claim 1, from which claims 3 and 5 depend. Further, Applicant submits that neither Okumura nor Kaburagi overcomes the deficiencies of the combination of Tanaka and Isami as applied to claim 1.

Accordingly, Applicant submits that the combination of Tanaka, Isami, Okumura and Kaburagi fails to disclose or suggest all the features of claim 1, as well as all the features of claims 3 and 5, which depend from claim 1. It is respectfully requested that the requested that the rejection be withdrawn.

Claims 6 and 7 are rejected under 35 U.S.C. §103(a) as being unpatentable over Tanaka, Isami and U.S. Patent 6,480,180 issued to Moon. Applicant respectfully traverses this rejection for at least the following reasons.

As stated on page 5 of the Office Action, the features of claim 6 which are similar to the features of claim 1 are rejected based on the discussion of the rejection of claim 1, and in particular, the teachings of Tanaka and Isami. Therefore, for at least the reasons discussed above with regard to claim 1, Applicant submits that the submits that nowhere does Tanaka disclose a controller for generating a scan control signal and a column control signal by utilizing driving data and a driving control signal . . . and generating gamma data having a plurality of values for gradation and a column driver unit for outputting a column signal utilizing the column control signal, R, G, B data and the gradation voltage, as recited in claim 6.

For at least these reasons, Applicant submits that the combination of Tanaka and Isami fails to disclose or suggest a column driver with all the features recited in claim 6. Further, Applicant submits that Moon also fails to overcome the deficiencies of Tanaka and Isami. Thus, the combination of Tanaka, Isami and Moon fails to disclose or suggest all the features of claim 6 and thus, fails to render obvious the subject matter of claim 6. For at least this reason, Applicant also submits that the combination of Tanaka, Isami and Moon fails to disclose or suggest all the features of claim 7, which depends from claim 6. It is respectfully requested that the rejection be withdrawn.

Claim 8 is rejected under 35 U.S.C. §103(a) as being unpatentable over Tanaka, Isami, Okumura, Kaburagi, and Moon. Applicant respectfully traverses this rejection for at least the following reasons.

First, Applicant respectfully submits that the Okumura and Kaburagi references were not applied to claim 6, from which claim 8 depends, were not touched upon in the paragraph abridging pages 6 and 7 of the Office Action which set forth the rejection of claim 8. Thus, clarification of the rejection is respectfully requested.

Secondly, for at least the reasons discussed above with regards to claim 6, from which claim 8 depends, Applicant submits that the combination of Tanaka, Isami and Moon fails to disclose or suggest all the features of claim 6, from which claim 8 depends. Further, Applicant submits that neither Okumura nor Kaburagi overcomes the deficiencies of the combination of Tanaka, Isami and Moon, as applied to claim 6. Accordingly, Applicant submits that the combination of Tanaka, Isami, Moon, Okumura and Kaburagi fails to disclose or suggest all the features of claim 8, and thus fails to render obvious the subject matter of claim 8. It is respectfully requested that the requested that the rejection be withdrawn.

Claims 9-14 are rejected under 35 U.S.C. §103(a) over Tanaka, Isami, Moon and Applicant's Alleged Admission. Applicant respectfully traverses this rejection for at least the following reasons.

For at least the reasons discussed above with regard to claim 6, from which claims 9-14 depend, Applicant respectfully submits that the combination of Tanaka, Isami and Moon fails to disclose all the features of claim 6. Thus, Applicant respectfully submits that methods of RSDS, LVDS and TMDS, as discussed in Applicants' originally filed specification, fail to overcome the deficiencies of the combination of Tanaka, Isami and Moon, as discussed above with regard to claim 6. Thus, the combination of Tanaka, Isami, Moon and Applicant's Alleged Admission fails to render obvious the subject matter of claims 9-14. It is respectfully requested that the rejection be withdrawn.

# **CONCLUSION**

Applicant believes that a full and complete response has been made to the pending Office Action and respectfully submits that all of the stated objections and grounds for rejection have been overcome or rendered moot. Accordingly, Applicant respectfully submits that all pending claims are allowable and that the application is in condition for allowance.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact the Applicant's undersigned attorney at the number below to expedite prosecution.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,

Hae-Chan Park

Reg. No. 50,114

Date: October 20, 2003

Attachments: Petition for Extension of Time

Check No. 136722 for \$110.00

McGuireWoods LLP

1750 Tysons Boulevard Suite 1800 McLean, VA 22102-4215

Tel: 703-712-5365 Fax: 703-712-5280

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